CLAIMS

1. A method of immobilizing a target molecule to a solid support surface capable of interacting with the target molecule, which method comprises the steps of:

complexing the target molecule with a vesicular structure capable of forming a dissociable complex with the target molecule,

contacting the complex formed with the solid support surface to thereby bind the target molecule to the surface,

dissociating the complex, and

removing the vesicular structure from the solid support surface to leave the target molecule immobilized on the surface.

2. The method according to claim 1, wherein the vesicular structure is selected from liposomes and micelles.

3. The method according to claim 1, wherein the vesicular structure is a micelle.

4. The method according to claim 1, wherein the target molecule and the vesicular structure carry opposite electric charges.

5. The method according to claim 1, wherein the target molecule and the solid support surface carry electric charges of the same kind.

6. The method according to claim 1, wherein the target molecule carries a negative charge.

7. The method according to claim 1, wherein the target molecule and the solid support surface each carry a negative charge, and the vesicular structure carries a positive charge.

8. The method according to claim 1, wherein binding of the target molecule to the surface causes at least partial dissociation of the complex.

9. The method according to claim 1, wherein the target molecule is a ligand capable of binding an analyte.

10. The method according to claim 1, wherein the target molecule is a capture agent capable of binding a ligand or a ligand-binding agent.

11. The method according to claim 1, wherein the target molecule is selected from nucleic acids and antibodies.

12. The method according to claim 11, wherein the target molecule is an oligonucleotide.

13. The method according to claim 11, wherein the target molecule is an artificial oligonucleotide.

14. The method according to claim 1, wherein the target molecule is a low molecular weight organic compound.

15. The method according to claim 1, wherein the solid support surface comprises a reactive group capable of reacting with a functional group of the target molecule to form a covalent bond.

16. The method according claim 1, wherein the solid support surface comprises one member of a specific binding pair, and the other member of the binding pair is conjugated to or part of the target molecule.

17. The method of claim 16, wherein the surface-bound member is avidin or streptavidin, and the target molecule is biotin-tagged.

18. The method according to claim 1, wherein the solid support surface comprises a hydrogel.

19. The method according to claim 18, wherein the hydrogel is based on dextran.

20. The method according to claim 19, wherein the dextran comprises carboxymethyl groups.

21. The method according to claim 20, wherein the carboxymethyl groups are activated to reactive groups.

22. The method according to claim 1, wherein the ratio of target molecule to vesicular structure is about 1:1.

23. The method according to claim 3, wherein the ratio of target molecule to micelle is about 1:1.

24. The method according to claim 1, wherein the vesicular structure is a micelle comprising cetyltrimethylammonium bromide (CTAB).

25. The method according to claim 1, wherein the method is carried out in a flow cell.

26. The method according to claim 1, wherein the solid support is a sensor surface.

27. The method according to claim 26, wherein the sensor surface permits detection of events at the surface by mass-sensing.

28. The method according to claim 27, wherein the mass-sensing comprises evanescent wave sensing.

29. The method according to claim 28, wherein the evanescent wave sensing is based on surface plasmon resonance.

30. The method according to claim 1, wherein the solid support is a chromatographic particle.

31. A method of sensitizing a solid support surface with a ligand, which method comprises the steps of:

providing a capture agent for the ligand, which capture agent is capable of binding to the solid support surface,

complexing the capture agent with a vesicular structure capable of forming a dissociable complex with the capture agent,

contacting the complex formed with the solid support surface to thereby bind the capture agent to the surface,

dissociating the complex,

removing the vesicular structure from the solid support surface to leave the ligand immobilized on the surface, and

contacting the solid support surface with the ligand to bind the ligand to the immobilized capture agent.

32. The method according to claim 31, wherein the capture agent is an oligonucleotide, and the ligand is conjugated to an oligonucleotide complementary to the capture oligonucleotide.

33. The method according to claim 31, wherein different discrete areas of the solid support surface supporting a general capture agent are selectively contacted with different ligands to provide a solid support surface with an array of different ligands.

34. The method according to claim 31, wherein different discrete areas of the solid support surface, each supporting a different capture agent, are contacted with different ligands to provide a solid support surface with an array of different ligands.

35. The method according to claim 31, wherein the solid support surface is a sensor surface.

36. A method for assaying a sample for at least one analyte, which method comprises contacting the sample with a solid support surface sensitized with at least one analyte-binding ligand by to the method according to claim 31, and detecting binding of the analyte to the surface.

37. A method for studying analyte-ligand binding interactions, which method comprises contacting at least one analyte with a solid support surface sensitized with at least one analyte-binding ligand by to the method according to claim 31, and studying binding interactions between anlyte and ligand at the surface.

38. A reagent kit comprising:

a first oligonucleotide having a function for coupling to a solid support,

a second oligonucleotide complementary to the first oligonucleotide and having a function for direct or indirect coupling to a ligand, and

a surfactant.

39. The kit according to claim 38, wherein the first and second oligonucleotides independently of each other are selected from aminoligonucleotides.

40. The kit according to claim 38, wherein the second oligonucleotide is an aminoligonucleotide modified by N-succinimidyl 3-(2-pyridyldithio)propionate (SPDP) conjugation.

41. The kit according to claim 40, wherein the kit further comprises a reagent for reducing the pyridyldithio group of the N-succinimidyl 3-(2-pyridyldithio)propionate-modified aminoligonucleotide to a thiol group.

42. The kit according to claim 38, wherein the surfactant is cetyltrimethylammonium bromide (CTAB).

43. The kit according to claim 38, wherein the kit further comprises instructions for use thereof.

44. The kit according to claim 43, wherein the instructions comprise directions for mixing the surfactant with an aqueous liquid such that the surfactant forms vesicular structures in the liquid.